

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

BYTEMARK, INC.,	§	
	§	
Plaintiff,	§	
	§	
vs.	§	Civil Action No. 6:22-cv-00304-ADA
	§	
MASABI LTD.,	§	JURY TRIAL DEMANDED
	§	
Defendant	§	

**DEFENDANT'S OPENING CLAIM CONSTRUCTION BRIEF  
REGARDING U.S. PATENT NOS. 10,360,567 and 10,346,764**

**I. Introduction**

Pursuant to the Standing Order Governing Patent Proceedings 4.4 and the Court's Scheduling Order (Dkt.#40), Defendant Masabi Ltd. ("Defendant" or "Masabi") submits herewith its Opening Claim Construction Brief concerning United States Patent Nos. 10,360,567 ("the '567 Patent) (Ex. A), and 10,346,764 ("the '764 Patent") (Ex. B) (collectively the "Patents-in-Suit"). Defendant has identified below the disputed terms in the Patents-in-Suit and the claims that are indefinite.

**II. The Patents-in-Suit**

The '567 Patent was issued on July 23, 2019 and is based on an application filed on May 23, 2014. The '764 Patent was issued on July 9, 2019 and is based on an application that was filed on August 11, 2015. Plaintiff Bytemark, Inc. ("Plaintiff") has asserted claims 1-16 of the '567 Patent and claims 3-8, 11-14 and 25 of the '764 Patent as being allegedly infringed by Defendant ("Asserted Claims"). Defendant's accused mobile ticketing system does not infringe the Asserted Claims.

Claims 1, 2, 9, 10, 15–21, 23, and 26–28 of the '764 Patent were invalidated by Xerox

Corp. as a result of successful IPR-2022-00621 (Ex. C - PTAB Decision). The Patents-in-Suit disclose well-known mobile ticketing technology that uses a visual validation object that can be readily seen by a ticket taker (train conductor). Plaintiff argued the alleged invention was novel over traditional bar code scanner validation ticketing systems.

### III. Argument

#### A. Defendant's Proposed Constructions for U.S. Patent No. 10,360,567 ('567)

The '567 patent is directed towards a “system and method for distributing electronic ticketing to mobile devices such that the ticket stored on the device is checked for its integrity from tampering and the device periodically reports on ticket usage with a central server.” (Ex. A, Abstract). The specification of the '567 patent describes numerous embodiments, however only one is reflected in the claims as issued. This embodiment is described as:

Data Integrity. Data integrity checking is to be sure that the pass data and the software managing that pass data on the user's device has not been altered improperly. For example, if the pass data or other data is unrecognized by the server or is inconsistent with a separate locally generated key on the device, there is an anomaly. When these anomalies are detected the tickets and user account are locked down to stop fraudulent activity. Behavioral Detection is focused on backend detection of usage of mobile ticketing and passes that do not match up with a consumer's typical usage habits... Whenever the ticketing software operating on the user's device determines that the disposable data has been maliciously altered, the session is cleared from the device, that is, the Temporary and Disposable Data is erased from the device. (Ex. A at col 13, ln 21-36)

The claim language of the '567 clearly and unmistakably follows precisely the described process wherein the server checks for a mismatch in the received data from the mobile phone and blocks the user account in response to perceived fraud and additionally storing an account data value indicating fraudulent activity and making the validation visual object, no longer available on the device.

The '567 patent has only one independent claim, and it recites this process:

1[a] A mobile ticketing system for detecting fraudulent activity of tickets using data integrity,

1[b] comprising: a mobile device in communication with a server;

1[c] a server adapted to receive authentication data for a user account from the mobile device via a data network, and transmit data in the form of a ticket payload that contains code to the mobile device embodying a pass,

1[d] wherein the pass includes a validation visual object that a ticket taker can rely on as verification of the pass without using a scanning device and wherein the validation visual object is not accessible until a time selected to be close to the point in time where the ticket has to be presented;

1[e] wherein the server is further configured to: receive the pass with the data from the mobile device and determine if there is any mismatch in the received data of the pass by comparing the received data with the data transmitted;

1[f] block the user account in an event of the received data is mismatched with the transmitted data and detected as a fraudulent activity;

1[g] and determine the occurrence of the fraudulent activity associated with the user account in connection with the mobile ticketing system and store in a data record associated with the user account a data value indicating the fraudulent activity

1[h] and in dependence on the data value indicating fraudulent activity, the code in the ticket payload makes the pass, including the validation visual object, no longer available on the device.

(Ex. A, claim 1)

Although Figure 22 of the '567 is not specifically called out or referenced within the specification, it appears to generally disclose certain elements of Claim 1. In fact, claim 1 utilized terms and concepts cherry picked from throughout the specification and even recites concepts not discussed within the specification. The clearest portion of the specification relating to Claim 1 is:

Whenever the ticketing software operating on the user's device determines that the disposable data has been maliciously altered, the session is cleared from the device, that is, the Temporary and Disposable Data is erased from the device. In one embodiment, the software operating on the user's device checks the data files

representing the passes to see if a hash value for any of those files has changed or is invalid. In another embodiment, the software checks to see if the file has been modified or stored with a time stamp that is later than the time that the pass was stored on the device. In yet another embodiment, the software checks for the condition where the AII is not properly decrypting pass data that is stored on the device. Any of these conditions are examples where the data integrity test fails. (Ex. A at col 13, ln 42-56)

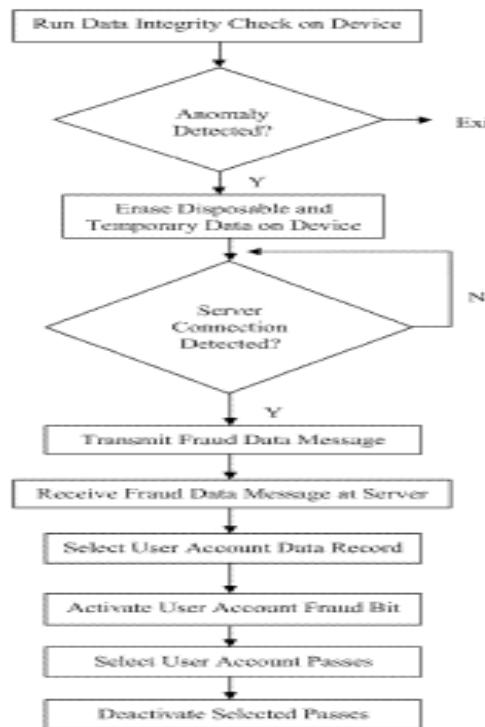


Figure 22

Ex. A – Figure 22

In an effort to sidestep Defendant's clearly presented and compelling non-infringement position, Plaintiffs seek to avoid any pertinent construction by relying on the "plain and ordinary meaning" of virtually every term and phrase. Although the clear language of the claims when construed in context would not read on the Defendant's software or processes, a failure to construe the claims would allow Plaintiffs to continue to ignore Defendants non-infringement position. If allowed, this would afford Plaintiffs the opportunity to continue this lawsuit without the

Defendants being provided a clear understanding of their position on the claim language or a clear position on how they contend the accused products infringe the patent.

Masabi courteously requests the following terms be construed in accordance with Defendant's proposed constructions.

**1. “PASS” - Recited in claims 1, 3, 4, 6-11, 13-16**

Defendant's Proposed Construction	Plaintiff's Proposed Construction
Computer code generated from a server, that creates a visual display object the customer sees on the phone.	No construction necessary – plain and ordinary meaning

Defendant's proposed construction is consistent with the plain language of the claim, and the essence of the invention as described in the specification. Claim 1 of the '567 patent specifically recites “a ticket payload that *contains code* to the mobile device *embodying a pass*” and “*the code in the ticket payload makes the pass, including the validation visual object*, no longer available on the device (Ex. A, Claim 1). [emphasis added] In addition, throughout the specification of the '567 patent there are multiple clear descriptions of the “code” or “computer code” comprises a set of executable computer instructions and not mere data (Ex. A, col. 2, ln 41-47; col. 3, ln 14-16; col. 4, ln 16-17; col. 5, ln 30-40; col 5, ln 55-56; col. 6, ln 1-9; col 6., ln 42-45; col. 9, ln 42-47; col 16., ln 9-24). Therefore, the overwhelming evidence from the '567 patent is that the term “pass” refers to computer code that generates the visual display object.

In addition, <https://www.lawinsider.com/dictionary/computer-code> defines “computer code” as “Computer Code means hardware, firmware, and software, regardless of form... such that when executed, the instructions cause a computer or other data processing system to carry out logic or other operations”. (Ex. E)

Furthermore, during prosecution of the '567 patent Bytemark acknowledged that the term

pass encompasses software generating the validation display object and not merely data: “The use of the data value being stored in the data record on the server subsystem *and the code* in the ticket payload which makes the pass, including the validation display object no longer available on the [user] device allows for the ticket taker to be able to rely on the pass that includes a validation visual object as verification of the pass without using a scanning device”. (Ex. F, ‘567 File Wrapper, p. 217).

The Plaintiff proposes no definition at all for “PASS” but merely relies on the “plain and ordinary meaning.” However, Plaintiff clearly disputes the Defendant’s proposed construction as they have failed to agree with Defendant’s proposed construction. Since the Plaintiff has provided no details as to their proposed construction absent disputing the Defendant’s logical and contextually based proposed construction, and since Plaintiff has similarly provided no direction from their factually devoid infringement contentions, it is imperative that the Court construe this term such that the Defendant is afforded the opportunity to make reasonable and rational responses on the subjects of non-infringement and invalidity without the unreasonable requirement of speculation as to Plaintiff’s proposed construction. Therefore, since Defendant’s proposed construction is clearly in dispute, Defendant’s proposed construction is the only proposed construction presented before this Court and is the most reasonable construction taken in light of the context of the claims. Defendant courteously asks that its construction be adopted by this Court.

## 2. **“BEHAVIORAL ANOMOLIES / ANOMOLY”** - Recited in claims 2 and 3

Defendant’s Proposed Construction	Plaintiff’s Proposed Construction
Server detection of usage of mobile ticketing and passes that do not match up with a consumer’s typical usage habits of travel patterns, mismatched data or multiple failed attempts.	No construction necessary – plain and ordinary meaning

Defendant’s proposed construction is consistent with the plain language of the claim, and

the essence of the invention as described in the specification. Plaintiff proposes no definition at all but merely relies on the “plain and ordinary meaning.” Defendant asserts that the term “behavioral anomalies” has no plain and ordinary meaning and is in essence a generalized term devoid of any specificity outside of what is disclosed in the ‘567 patent specification. The ‘567 patent specification suggests what is meant by “behavioral anomalies” in only two locations: “Behavioral Detection is focused on backend detection of usage of mobile ticketing and passes that do not match up with a consumer's typical usage habits.” (Ex. A, col. 13, ln 28-30); and “Other behavioral anomaly detection can be used. For example, if the same pass data is being used for multiple attempts to activate the same pass from different devices.” (Ex. A, col. 13, ln 65-67).

Plaintiff’s “plain and ordinary meaning” position is at odds with Defendant’s proposed construction. Plaintiff has provided no details as to its proposed construction absent disputing the Defendant’s logical and contextually based proposed construction, and since Plaintiff has similarly provided no direction from their factually devoid infringement contentions, it is imperative that the Court construe this term such that the Defendant is afforded the opportunity to make reasonable and rational responses on the subjects of non-infringement and invalidity without the unreasonable requirement of speculation as to Plaintiff’s proposed construction. Therefore, since Defendant’s proposed construction is clearly in dispute, Defendant’s proposed construction is the only proposed construction presented before this Court and is the most reasonable construction taken in light of the context of the claims; it should be adopted by this Court

**3. “TIME STAMP” - Recited in claim 6**

Defendant’s Proposed Construction	Plaintiff’s Proposed Construction
A numerical representation of the date and time of when a file was first created and the date and time of any modifications to the file.	No construction necessary – plain and ordinary meaning

Defendant's proposed construction is consistent with the plain language of the claim, and the essence of the invention as described in the specification. Plaintiff proposes no definition at all but merely relies on the "plain and ordinary meaning." Although the '567 patent specification makes no attempt to define or limit the term "time stamp", <https://www.lawinsider.com/search?order=common&tab=definition&definition:Time+stamp> defines the term as "the means of identifying the time and date at which data is transmitted, received or created by the Trading System. An Order may be given a new Time Stamp when it is modified, or re-activated." (Ex. E). It is equally notable that the USPTO, during prosecution of the '567 patent held that "It is now admitted prior art that time stamps were old and well-known to persons skilled in the art at the time the invention was made." (Ex. F. pg. 328)

Despite Defendant's well-supported position, Plaintiff proposes no definition at all but merely relies on the "plain and ordinary meaning." However, Plaintiff clearly disputes the Defendant's proposed construction as they have failed to agree with Defendant's proposed construction. Since the Plaintiff have provided no details as to their proposed construction absent disputing the Defendant's logical and contextually based proposed construction, and since Plaintiff has similarly provided no direction from their factually devoid infringement contentions, it is imperative that the Court construe this term such that the Defendant is afforded the opportunity to make reasonable and rational responses on the subjects of non-infringement and invalidity without the unreasonable requirement of speculation as to Plaintiff's proposed construction. Therefore, since Defendant's proposed construction is clearly in dispute, Defendant's proposed construction is the only proposed construction presented before this Court and is the most reasonable construction taken in light of the context of the claims; it should be adopted by this Court.

**4. “PASS DATA” - Recited in claims 4, 6-8 and 1exh6**

Defendant’s Proposed Construction	Plaintiff’s Proposed Construction
A numerical data value assigned by the server and utilized by the pass code to generate the visual validation display object.	No construction necessary – plain and ordinary meaning

Defendant’s proposed construction is consistent with the plain language of the claim, and the essence of the invention as described in the specification. The claims of the ‘567 patent clearly differentiate the “pass” from “pass data” (Ex. A, Claims 1, 4, 5, 6, 8 and 16). As set forth above, Defendant has established a reasonable definition of the term “pass” which comprises computer code generating the visual display object. The term “pass data” is reasonably construed as the computer code generated from a server, that creates a visual display object the customer sees on the phone. The specification of the ‘567 patent supports this interpretation: “Data integrity checking is to be sure that the pass data and the software managing that pass data on the user’s device has not been altered improperly.” (Ex. A, col. 13, ln 21-23). The USPTO recognized that the pass and the pass data represent different concepts: “One of ordinary skill in the art would have recognized that applying the known technique of disable the pass functionality by erasing the pass data stored on the device would have yielded predictable results and resulted in an improved system.” (Ex. F, p. 331).

The Plaintiff again proposes no definition at all but merely relies on the “plain and ordinary meaning.” However, Plaintiff clearly disputes the Defendant’s proposed construction as they have failed to agree with Defendant’s proposed construction. In addition, Defendant asserts there is no “plain and ordinary meaning” of the term “pass data” as it is dependent on context and application. Since the Plaintiff have provided no details as to their proposed construction absent disputing the Defendant’s logical and contextually based proposed construction, and since Plaintiff has similarly

provided no direction from their factually devoid infringement contentions, it is imperative that the Court construe this term such that the Defendant is afforded the opportunity to make reasonable and rational responses on the subjects of non-infringement and invalidity without the unreasonable requirement of speculation as to Plaintiff's proposed construction. Therefore, since Defendant's proposed construction is clearly in dispute, Defendant's proposed construction is the only proposed construction presented before this Court and is the most reasonable construction taken in light of the context of the claims; it should be adopted by this Court.

**5. "MISMATCH OF A HASH VALUE" - Recited in claim 5**

Defendant's Proposed Construction	Plaintiff's Proposed Construction
A unique numerical value created by the server that identifies the contents of the file that is stored on the mobile device. A mismatch is when the hash value stored on the mobile device is not identical to the hash value stored on the server.	No construction necessary – plain and ordinary meaning

Defendant's proposed construction is consistent with the plain language of the claim, and the essence of the invention as described in the specification. Defendant notes that neither the '567 patent specification nor the '567 prosecution history makes any attempt to define the term "hash value".

However, in looking at the extrinsic evidence, the source

<https://www.lawinsider.com/search?order=common&tab=definition&definition:Hash+Value>

defines "hash value" as "refers to the value obtained by calculation (such as using MD5, SHA and other algorithms) based on the content of electronic data. In theory, different files have different hash values obtained." (Ex. E) Defendant notes that this is a well understood definition of the term "hash value" in the computing world and should be adopted by this Court. Claim 4, upon which claim 5 depends, clearly recites the server checking the pass data stored on the

device to check for a mismatch (referring to claim 1). Therefore, the proposed construction comports to both the claim language as well as the clear definition of hash value.

The Plaintiff again proposes no definition at all but merely relies on the “plain and ordinary meaning.” However, Plaintiff clearly disputes the Defendant’s proposed construction as they have failed to agree with Defendant’s proposed construction. Since the Plaintiff have provided no details as to their proposed construction absent disputing the Defendant’s logical and contextually based proposed construction, and since Plaintiff has similarly provided no direction from their factually devoid infringement contentions, it is imperative that the Court construe this term such that the Defendant is afforded the opportunity to make reasonable and rational responses on the subjects of non-infringement and invalidity without the unreasonable requirement of speculation as to Plaintiff’s proposed construction. Therefore, since Defendant’s proposed construction is clearly in dispute, Defendant’s proposed construction is the only proposed construction presented before this Court and is the most reasonable construction taken in light of the context of the claims; it should be adopted by this Court.

**6. “UPDATED USAGE DATA” - Recited in claim 7**

Defendant’s Proposed Construction	Plaintiff’s Proposed Construction
Information regarding the last activation of visual validation of a particular ticket.	No construction necessary – plain and ordinary meaning

Defendant’s proposed construction is consistent with the plain language of the claim, and the essence of the invention as described in the specification. Defendant notes that the use of the term “usage data” is not found within the specification of the ‘567 patent and only is found in the ‘567 claims. Defendant does recognize that the specification of the ‘567 patent does refer to “usage” as comprising usage habits, previous usage, and repeated or fraudulent usage. (Ex. A, col.

13, ln 28-42). Each and every usage described within the ‘567 patent comprises activation of the “visual display object”. Therefore, Defendant’s proposed construction is consistent with both the language as well as the broader concepts set forth in the ‘567 specification. The term “updated” unmistakably refers to a change in the usage data stemming from an activation of the visual validation. Therefore, the proposed construction matches both the disclosure of the specifications in combination with the clear wording of claim 7.

The Plaintiff again proposes no definition at all but merely relies on the “plain and ordinary meaning.” However, Plaintiff clearly disputes the Defendant’s proposed construction as they have failed to agree with Defendant’s proposed construction. Since the Plaintiff have provided no details as to their proposed construction absent disputing the Defendant’s logical and contextually based proposed construction, and since Plaintiff has similarly provided no direction from their factually devoid infringement contentions, it is imperative that the Court construe this term such that the Defendant is afforded the opportunity to make reasonable and rational responses on the subjects of non-infringement and invalidity without the unreasonable requirement of speculation as to Plaintiff’s proposed construction. Therefore, since Defendant’s proposed construction is clearly in dispute, Defendant’s proposed construction is the only proposed construction presented before this Court and is the most reasonable construction taken in light of the context of the claims; it should be adopted by this Court.

#### 7. **“FRAUDULENT ACTIVITY BIT”** - Recited in claim 15

Defendant’s Proposed Construction	Plaintiff’s Proposed Construction
A single binary digit, set by one of two conditional states, indicating the presence or lack of fraud.	No construction necessary – plain and ordinary meaning

Defendant’s proposed construction is consistent with the plain language of the claim, the

extrinsic evidence, and the essence of the invention as described in the specification. Defendant notes that the ‘567 specification makes no attempt to define “fraudulent activity bit” but when utilizing the term “bit” or “status bit” it consistently utilizes this term in a singular and not plural format. The source

<https://www.lawinsider.com/search?definition:Bit&tab=definition&order=common> defines the term “bit” as “means binary digit, the smallest unit of measurement used to quantify computer data.” (Ex. E). Defendant asserts that the term “bit” has been well understood in the industry and, in fact, common parlance as a single binary digit. There is nothing within the ‘567 specification or prosecution history to counter this definition. Therefore, Defendant’s proposed construction of “fraudulent activity bit” is the most reasonable construction of this term.

The Plaintiff again proposes no definition at all but merely relies on the “plain and ordinary meaning.” However, Plaintiff clearly disputes the Defendant’s proposed construction as they have failed to agree with Defendant’s proposed construction. Since the Plaintiff have provided no details as to their proposed construction absent disputing the Defendant’s logical and contextually based proposed construction, and since Plaintiff has similarly provided no direction from their factually devoid infringement contentions, it is imperative that the Court construe this term such that the Defendant is afforded the opportunity to make reasonable and rational responses on the subjects of non-infringement and invalidity without the unreasonable requirement of speculation as to Plaintiff’s proposed construction. Therefore, since Defendant’s proposed construction is clearly in dispute, Defendant’s proposed construction is the only proposed construction presented before this Court, and is the most reasonable construction taken in light of the context of the claims; it should be adopted by this Court.

### **8. “VALIDATION VISUAL OBJECT” - Recited in claim 1**

Defendant asserts that this Court need not construe the term “validation visual object” as the term has already been construed in a prior lawsuit between the same parties during review of USPN 9,239,993 which is a parent application to the ‘567 Patent. Magistrate Payne, in the construction of the terms of the ‘993 Patent found that the term should be construed as:

**The Court construes the terms “visual validation display object” and “validation display object” to mean “any object that is readily recognizable from human observation that can verify a ticket, or the code or commands that can generate such an object.” (Ex. D, Case No. 2:16-cv-0543-JRG-RSP, Doc. 81)**

#### **B. Defendant’s Proposed Constructions for U.S. Patent No. 10,346,764 (“764”)**

Defendant does not request the Court to construe any claims for the ‘764 patent. However, Defendant notes that the following terms previously agreed upon by the parties during review of family member patents U.S. 8,494,967 and 9,239,993. (Ex. D, Case No. 2:16-cv-0543-JRG-RSP, Doc. 81) Defendant encourages the adoption of these constructions to facilitate unnecessary relitigating of already agreed upon definitions.

Term	Agreed Construction
“obtain”	Plain and ordinary meaning
“readily recognizable visually”	Plain and ordinary meaning
“unique alphanumeric string”	Plain and ordinary meaning
“that causes upon visual recognition by the ticket taker”	When the animation or other human-perceptible visual image is instantaneously visually recognized and verified by the ticket taker
“for visual recognition by the ticket taker”	The animation or other human-perceptible visual image is for instantaneous visual recognition and verification by the ticket taker

### **IV. Listing of Claims That Are Indefinite**

Pursuant to Standing Order 4.4, Defendant contends the asserted claims of the ‘567 and ‘764 patents are invalid based on indefiniteness under 35 U.S.C. § 112, ¶ 2, lack of written

description under 35 U.S.C. § 112, ¶ 1, and/or lack of enablement under 35 U.S.C. § 112, ¶ 1. Defendant cannot yet provide a complete list of their § 112 defenses because Defendant does not know whether Plaintiff will proffer a construction for certain terms and phrases broader than, or inconsistent with, the construction that would be supportable by the disclosure set forth in the specification.

Accordingly, Defendant reserves the right, to the extent permitted by the Court and the applicable statutes and rules, to supplement, amend, and/or modify these § 112 invalidity contentions as discovery progresses.

The non-exclusive and non-limiting list of claim terms that are indefinite within the ‘567 and the ‘764 patents are as follows:

‘567 Claims 1, 2, 4, 5, 6, 7 & 15 are invalid due to indefiniteness

- ticket payload – claim 1
- pass – claim 1
- validation visual object – claim 1
- behavioral anomalies – claim 2
- the pass data – claim 4
- mismatch of a hash value – claim 5
- stored pass data – claim 6
- updated usage data - claim 7
- set a status bit - claim 15
- fraudulent activity bit is set – claim 15

‘764 – Claims 1, 10 & 11 are invalid due to indefiniteness

- visual validation – claim 1
- token – claim 1
- unique identifier – claims 1 & 10
- ticket payload – claim 1
- pre-determined input event – claim 10
- validation display object – claim 1
- configured to be secure – claim 11

**V. Conclusion**

For all of the reasons given above, the Court is respectfully requested to construe the disputed claim terms as discussed herein, and invalidate the identified claims based on indefiniteness, as requested by Defendant.

**BROZYNSKI & DALTON PC**

DATED: April 9, 2024

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**CERTIFICATE OF SERVICE**

This is to certify that all known counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system on this the 9th day of April, 2024. Any other known counsel of record will be served with a copy of this document by email and/or facsimile transmission.

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By: Douglas LaLone